CLAIMS

1. A tool (1) for surfacing an optical surface
(2), which tool comprises a rigid support (4) having a
transverse end surface (13), an elastically compressible
interface (5) that is pressed against and covers said end
surface (13), and a flexible buffer (16) adapted to be
pressed against the optical surface (2) and which is
pressed against and covers at least part of the interface
(5) on the side opposite to and in line with said end
surface (13), characterized in that the buffer has a
central portion (6a) that is in line with said end surface
(13) and a peripheral portion (14) that is transversely
beyond said end surface (13) and return spring means (15)
join this peripheral portion (14) to the support (4).

2. Tool according to claim 1, characterized in
that the buffer (6) is of one-piece construction, the
central portion (6a) and peripheral portion (14) forming a
single component (6).

3. Tool according to claim 2, characterized in
that the buffer (6) comprises a plurality of petals (14b)
projecting transversely from the central portion (6a).

4. Tool according to claim 1 or claim 2,
characterized in that said peripheral portion (14) takes
the form of a ring (14a) around the central portion (6a).

5. Tool according to claim 4, characterized in
that the buffer (6) is of one-piece construction and when
unstressed assumes the shape of a disc.

6. Tool according to any preceding claim,
characterized in that the interface (5) has a central
portion (5a) that is in line with said end surface (13) and
a peripheral portion (16) that is transversely beyond said
end surface (13) and is between the peripheral portion (14)
of the buffer (6) and the return means (15).

7. Tool according to claim 6, characterized in
that the peripheral portion (16) of the interface (5) when

unstressed assumes the shape of a ring around the central portion (5a) of the interface (5).

8.   Tool according to claim 7, characterized in that it further comprises a deformable ring (17) transversely around the support (4) and between the peripheral portion (16) of the interface (5) and the return means (15).

9.   Tool according to claim 8, characterized in that the ring (17) has a circular longitudinal section.

10.   Tool according to any of claims 6 to 9, characterized in that the interface (5) is of one-piece construction and its central portion (5a) and peripheral portion (16) form a single component (5).

11.   Tool according to claim 10, characterized in that when unstressed the interface (5) assumes the shape of a disc.

12.   Tool according to any preceding claim, characterized in that said return means (15) comprise a leaf spring (18) projecting transversely from the support (4).

13.   Tool according to claim 12, characterized in that said leaf spring (18) is joined to the support (4) at a first end (18a) and to the peripheral portion (14) of the buffer (6) at a second end (18b).

14.   Tool according to claim 13, characterized in that said leaf spring (18) is rigidly anchored in the support (4) at its first end (18a).

15.   Tool according to any of claims 12 to 14, characterized in that the return means (15) comprise a star-shaped component (19) fixed to the support (4) and provided with branches (18) each forming a leaf spring (18).

16.   Tool according to claim 15, characterized in that the support (4) comprises two jaws (7, 8) fixed together, the star-shaped part (19) having a central

portion (20) that is clamped between the two jaws (7, 8) and from which its branches (18) project.

       17. Tool according to claim 15 or claim 16, characterized in that the buffer (6) is of one-piece construction and comprises a plurality of petals (14b) projecting transversely from its central portion (6a) and each branch (18) is in line with a petal (14b).

       18. Tool according to claim 17, characterized in that it comprises seven petals (17b) and seven branches (18).

       19. Tool according to any preceding claim, characterized in that the end surface (13) of the support (4) is plane.

       20. Tool according to any of claims 1 to 18, characterized in that the end surface (13) of the support (4) is convex.

       21. Tool according to any of claims 1 to 18, characterized in that the end surface (13) of the support (4) is concave.